

(No Model.)

D. R. JOSLYN.
CAR COUPLING.

No. 533,648.

Patented Feb. 5, 1895.

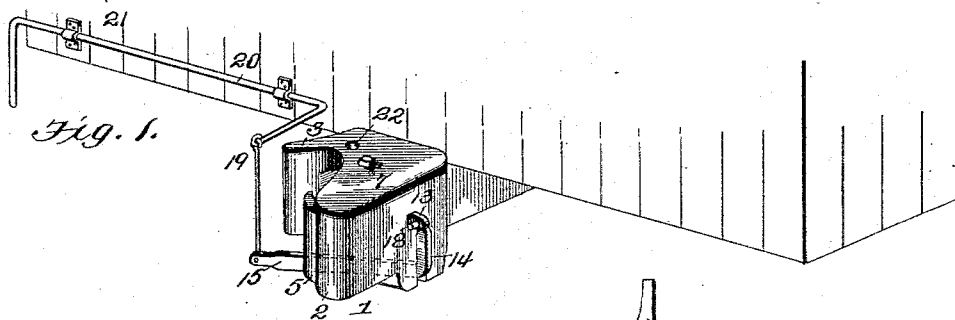


Fig. 2.

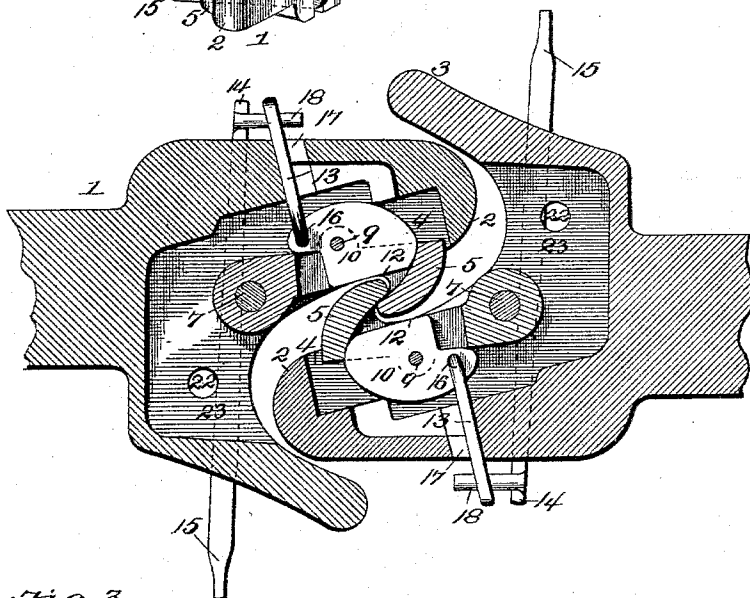


Fig. 3.

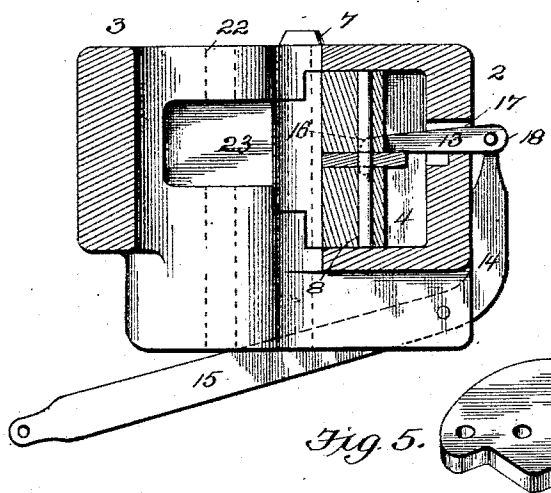


Fig. 4.

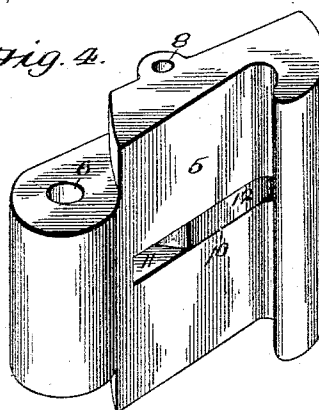
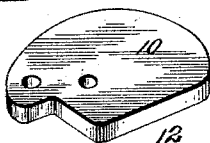


Fig. 5.



Witnesses

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By his Attorneys.

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UNITED STATES PATENT OFFICE.

DANIEL R. JOSLYN, OF GURDON, ARKANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 533,648, dated February 5, 1895.

Application filed August 28, 1894. Serial No. 521,517. (No model.)

To all whom it may concern:

Be it known that I, DANIEL R. JOSLYN, a citizen of the United States, residing at Gurdon, in the county of Clark and State of Arkansas, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

10 The object of the present invention is to improve the construction of car couplings, and to provide a simple and efficient one capable of automatic coupling and adapted to be readily uncoupled without going between cars.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

20 In the drawings: Figure 1 is a perspective view of a car coupling constructed in accordance with this invention and shown applied to a car. Fig. 2 is a horizontal sectional view of two draw-heads coupled. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the pivoted jaw. Fig. 5 is a detail view of the unlocking lever.

25 Like numerals of reference indicate corresponding parts in all the figures of the drawings.

30 I designates a draw-head, having forwardly and outwardly projecting sides 2 and 3, forming an intermediate vertical opening. The side 2 extends outward beyond the other side 3, and is provided at its inner face with a cavity 4, and arranged adjacent to the latter is a pivoted jaw 5, adapted to engage a similar jaw of a corresponding draw-head, and to be swung backward from the intervening space 40 between the sides 2 and 3, into the cavity of the main projecting side 2, for uncoupling.

45 The pivoted jaw is provided, at its inner end, with a vertical perforation or eye 6, through which passes a vertical pin 7, arranged in registering perforations of the draw-head; and at its inner side the pivoted jaw is provided with vertically-aligned eyes or openings 8, receiving a vertical pin 9, which fulcrums a horizontally-disposed unlocking lever 10, in a slot 50 or opening 11 of the pivoted jaw. The horizontally-disposed unlocking lever is substan-

tially segmental, and it has a straight outer edge 12, arranged flush with the outer face of the pivoted jaw, when the latter is in position for coupling.

55 The inner end of the horizontally-disposed unlocking lever is provided with a perforation, and is connected by a short horizontal bar 13 with an upward-extending arm 14, of a bell-crank lever 15, which extends beneath 60 the draw-head transversely thereof. The inner end of the short horizontal bar is provided with a depending pin 16, fitting in the perforation of the unlocking lever, and preferably formed integral therewith. The adjacent 65 side of the draw-head is provided with an opening 17, through which passes the horizontal bar; and the outer end of the latter is perforated and receives a horizontally-disposed pin 18 of the arm 14 of the bell-crank lever. 70

The bell-crank lever is fulcrumed adjacent to its angle in a slot at the bottom of the draw-head, and it is connected with an arm 19, of a rock-shaft 20, which is journaled in suitable bearings of a car 21, and terminates at its 75 outer end in a handle. The lower portion of the bell-crank operating lever is sufficiently heavy to hold the upward-extending arm 14 against the adjacent side of the draw-head, to maintain the pivoted jaw in proper position 80 for automatic coupling, and for holding the same in its locked position when coupled. When the lower portion of the operating lever is swung upward, by means of the rock-shaft, the upward-extending arm 14 is moved out- 85 ward to draw the pivoted jaw back from the vertical opening of the draw-head, into the cavity of the main projecting portion or side 2; and this same operation simultaneously throws the unlocking lever outward or forward toward the intervening opening between 90 the sides 2 and 3 of the draw-head, to force the hook or shouldered portion of the engaging pivoted jaw out of engagement, to render the operation of uncoupling positive. As soon 95 as the rock-shaft is released, the lower portion of the bell-crank lever will fall and return the pivoted jaw to its locked position, and will normally maintain the same in that position for automatic coupling. 100

The rock-shaft may be arranged to enable the operation of uncoupling to be performed

from either side of a car; and any suitable means may be arranged for uncoupling from the top thereof.

The draw-head is provided with a coupling-pin perforation 22, and it has a link cavity 23, to enable the draw-head to be coupled with cars employing the ordinary pin-and-link car coupling, or the like.

When two cars come together for coupling, the pivoted jaws yield sufficiently to pass each other, and to cause their shoulders to engage each other automatically, whereby the operation of coupling is automatic. It will also be apparent that the operation of uncoupling may be performed without going between cars.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In a car coupling, the combination of a draw-head, a horizontal swinging jaw pivotally mounted on the draw-head and provided with a longitudinal slot, an unlocking lever arranged in said slot and fulcrumed on and carried by the jaw and arranged to lie flush with the engaging side of the same when the jaw is coupled, and means for simultaneously swinging the jaw backward and throwing the unlocking lever outward, substantially as described.

2. In a car coupling, the combination of a draw-head, a horizontally swinging jaw pivotally mounted on the draw-head, an uncoupling lever fulcrumed on and carried by the jaw and arranged to lie flush with the engaging side of the same and adapted to be swung outward to disengage a corresponding jaw from the said jaw, a bar connected with the uncoupling lever, and means for actuating the bar, whereby the jaw is swung back and the uncoupling lever is simultaneously operated, substantially as described.

3. In a car coupling, the combination of a draw-head provided with outward-extending sides forming an intervening space, one of the sides being provided with a recess or cavity, a pivoted jaw mounted in the draw-head at the space between the sides thereof and arranged to swing backward into the recess or cavity in uncoupling and provided with a horizontal slot, a horizontally-disposed unlocking lever fulcrumed intermediate of its ends in said slot, a bell crank lever fulcrumed at the bottom of the draw-head and located on the exterior thereof and having an upward-extending arm arranged at one side of the draw-head, and a horizontal bar connecting the upward-extending arm of the bell-crank lever with the unlocking lever and passing through the adjacent side of the draw-head, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DANIEL R. JOSLYN.

Witnesses:

W. I. SEAHORN,
W. M. BURT.